

[P-465D] Proactive clinical pharmacy involvement to improve compliance with metformin monitoring guidelines

Locke, K. E., Caudill, J. L., Edie, C. F., Goodwillie, R. W., Kaufmann, B. A., Sutherland, M. T., Sutherland, S. L., Veterans Healthcare System of Ohio, Pharmacy Service (119), 3200 Vine St., Cincinnati, OH 45220, USA Internet: kristen.locke@med.va.gov

Metformin is contraindicated in patients with compromised renal function due to the potential for development of lactic acidosis. To ensure that monitoring criteria were being met, the Cincinnati VA initiated a retrospective medication evaluation review (MUE). The criteria consisted of baseline and annual serum creatinine (SrCr) measurements for all patients receiving therapy, and appropriate action taken by the provider within 2 weeks if SrCr values were elevated above 1.5 mg/dL for males and 1.4 mg/dL for females. This retrospective review revealed nearly 100% compliance with the baseline and annual monitoring criteria, as well as appropriate follow up when baseline labs were elevated. However, appropriate follow up associated with elevated SrCr values during routine measurements was found to be only 37%. As a result, clinical pharmacy implemented a prospective review process in January 1999 to ensure timely follow up of elevated serum creatinine values in patients receiving metformin therapy. A computerized search is performed biweekly to identify all patients receiving metformin prescriptions within the previous 6 month period, as well as SrCr values measured within the past 2 weeks. Clinical pharmacists notify providers of patients with elevated SrCr values, and patients are followed for appropriate action. A computerized search biannually identifies all patients receiving new prescriptions for metformin to ensure that baseline labs were drawn, and the MUE is then reported to the Pharmacy and Therapeutics Committee. Since the implementation of this pharmacy driven review process, appropriate action regarding elevated SrCr values has risen to 99%.